

Abstract of the Disclosure

Disclosed are aqueous adhesives compositions which emit low residual formaldehyde and suitable for bonding rubbers to a metal substrate under pre-bake conditions. The adhesive composition comprises a phenolic novolak, acid acceptor and chlorinated natural rubber, absent an organic crosslinker. Preferably the adhesive further comprises precipitated silica and/or carbon black. Also disclosed are composites of rubber bonded to metal, such as seals, gaskets, and linings. Effective bonds possessing excellent environmental resistance can be obtained in single coats resulting in rubber-tear failure from the rubber-metal bond.